

1999P7471US01; 60,426-003

**IN THE CLAIMS**

1.-18. (Cancelled)

19. (Previously Presented) A system for measuring seat occupant weight comprising:  
a first seat track fixed to a vehicle structure;  
a second seat track supported for movement relative to said first seat track for adjustment along a longitudinal axis, said first and second seat tracks being deflectable in a vertical direction due to an occupant weight force generated by an occupant sitting on a vehicle seat; and  
at least one sensor mounted directly to said first seat track to generate a weight signal by measuring deflection of said seat tracks due to seat occupant weight.

20. (Previously Presented) A system according to claim 19 wherein said first seat track includes a forward end and a rearward end with a central portion extending between said ends, said forward and rearward ends being mountable to the vehicle structure such that said central portion remains unsupported to form a gap between the vehicle structure and said central portion.

21. (Currently Amended) ~~A system according to claim 1~~ A system for measuring weight of an occupant seated on a vehicle seat comprising:  
a first track mounted to a vehicle structure;

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a second track supported for movement relative to said first track for adjustment along a longitudinal axis and being deflectable in a vertical direction due to an occupant weight force generated by the occupant sitting on the vehicle seat; and

at least one sensor mounted on one of said tracks for generating a signal representative of said occupant weight force wherein said sensor is mounted to said first track.

22-24. (Cancelled).

25. (Currently Amended) ~~A system according to claim 24~~ A system for measuring weight of an occupant seated on a vehicle seat comprising:

a first track mounted to a vehicle structure;

a second track supported for movement relative to said first track for adjustment along a longitudinal axis and being deflectable in a vertical direction due to an occupant weight force generated by the occupant sitting on the vehicle seat and wherein said first track and said second track form an inboard track assembly;

at least one sensor mounted on one of said tracks for generating a signal representative of said occupant weight force wherein said at least one sensor comprises a first sensor assembly mounted to said inboard track assembly for generating a first signal in response to measuring deflection of said inboard track assembly and a second sensor assembly mounted to an outboard track assembly spaced apart from said inboard track assembly, said second sensor assembly for generating a second signal in response to measuring deflection of said outboard track assembly and wherein said inboard and outboard track assemblies have a predetermined cross-sectional

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area with each track assembly having at least one track portion having a cross-sectional area that is less than said predetermined cross-sectional area, said first and second sensor assemblies being mounted on said track portion; and

a central processor for determining seat occupant weight based on said first and second signals.

26. (Previously Presented) A system according to claim 25 wherein said inboard and outboard track assemblies each include a forward end and a rearward end with a central portion extending between said ends, said ends being mounted to the vehicle structure such that said central portions are unsupported forming a gap between the vehicle structure and the track assemblies.

27. (Previously Presented) A system according to claim 26 wherein said track portion with said cross-sectional area that is less than said predetermined cross-sectional area, is located in said central portion.

28. (Previously Presented) A system according to claim 26 wherein said at least one track portion of each of said track assemblies is comprised of a first track portion located forwardly in said central portion and a second track portion located rearwardly in said central portion and wherein said first and second sensor assemblies each include a first sensor mounted on said first track portion and a second sensor mounted on said second track portion.

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29. (Previously Presented) A system according to claim 26 including an airbag control module in communication with said processor wherein deployment force of an airbag is controlled by said control module based on seat occupant weight.

30. (Currently Amended) ~~A system according to claim 24~~ A system for measuring weight of an occupant seated on a vehicle seat comprising:

a first track mounted to a vehicle structure;

a second track supported for movement relative to said first track for adjustment along a longitudinal axis and being deflectable in a vertical direction due to an occupant weight force generated by the occupant sitting on the vehicle seat and wherein said first track and said second track form an inboard track assembly;

at least one sensor mounted on one of said tracks for generating a signal representative of said occupant weight force wherein said at least one sensor comprises a first sensor assembly mounted to said inboard track assembly for generating a first signal in response to measuring deflection of said inboard track assembly and a second sensor assembly mounted to an outboard track assembly spaced apart from said inboard track assembly, said second sensor assembly for generating a second signal in response to measuring deflection of said outboard track assembly and wherein said outboard track assembly comprises a third track mountable to the vehicle structure and a fourth track mounted for movement relative to said second track and wherein said first sensor assembly is mounted to said first track and said second sensor assembly is mounted to said third track; and

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a central processor for determining seat occupant weight based on said first and second signals.

31-37. (Cancelled)

38. (Currently Amended) ~~A method according to claim 33 including the steps of~~ A method for determining weight of a seat occupant comprising the steps of:

providing a first track mounted to a vehicle structure and a second track supported for movement relative to the first track to form a first track assembly;

providing a second track assembly spaced apart from the first track assembly with the second track assembly including a third track mounted to the vehicle structure and a fourth track supported for movement relative to the third track;

mounting a first sensor assembly to the first track assembly by mounting the first sensor assembly to the first track of the first track assembly;

mounting a second sensor assembly to the second track assembly and by mounting the second sensor assembly to the third track of the second track assembly and wherein the first and second track assemblies are defined by a predetermined cross-sectional area and each track assembly has at least one track segment with a cross-sectional area that is less than the predetermined cross-sectional area and further including the steps of mounting the first sensor assembly in the track segment of the first track assembly and mounting the second sensor assembly in the track segment of the second track assembly;

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generating a first signal from the first sensor assembly in response to deflection of the first track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat;

generating a second signal from the second sensor assembly in response to deflection of the second track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat; and

combining the first and second signals to determine seat occupant weight.